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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Assignee's Docket No.: 7941.00)
Group Art Unit: 2662)
Serial No.: 09/317,312)
Examiner: Dmitry Levitan)
Filing Date: May 24, 1999)
Title: Synchronized Web)
Scrolling)

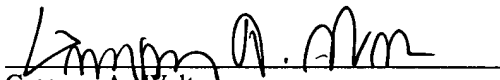
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APPEAL BRIEF

A Summary of Argument Begins on Page 3

The fee for this Brief may be billed to Deposit Account 140 - 225, NCR Corporation.

1. REAL PARTY IN INTEREST

NCR Corporation.

2. RELATED APPEALS AND INTERFERENCES

None.

3. STATUS OF CLAIMS

Claims 1 - 18 are pending, rejected, and appealed.

4. STATUS OF AMENDMENTS

No Amendments-after-final have been submitted.

5. SUMMARY OF INVENTION

Figure 1 illustrates three computers, all connected to the Internet 3. As the Specification, page 5, line 1 et seq., indicates, in Figure 2, all PARTICIPANTS connect to a SERVER through the Internet 3, and view a common web page (not shown).

As the Specification indicates, beginning on page 6, paragraph beginning with "Participant A," that participant A manipulates an "elevator bar" EB in Figure 7, to scroll through the web page, in a customary manner. The web page through which this participant is scrolling can be viewed as a long document 50 in Figure 8.

The long document 50 is conceptually divided into a number N of screens, as indicated. Which screen is displayed at a given time is determined by the position of the elevator bar EB, as indicated. Elevator bar EB is under the control of participant A.

The invention performs a particular type of operation. When participant A moves the elevator bar EB, to scroll, for example, from screen 1 to screen 4, the invention detects the movement. When the invention detects termination of the movement, the invention transmits a message to the other participants in Figure 2, telling them, in effect, that participant A has jumped from

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screen 1 to screen 4. Under the invention, all the other computers likewise jump from screen 1 to screen 4.

However, they perform the jumping without scrolling through screens 2 and 3. They jump directly from screen 1 to screen 4.

6. ISSUES

Whether claims 1, 2, 4 - 7, and 11 - 15 are anticipated under 35 USC § 102, based on Glaser.

Whether claims 3, 8 - 10, 17, and 18 are obvious under 35 USC § 103, based on Glaser and Furst.

7. GROUPING OF CLAIMS

Two groups of claims are present, namely,

Group 1, containing claims 1, 2, 4 - 7, and 11 - 15, and

Group 2, containing claims 3, 8 - 10, 17, and 18.

Claims 9, 10, and 12 - 18 stand or fall with their respective parent claims.

8. ARGUMENT

Summary of Argument

The Office Action asserts that, in Glaser, when one party to a computer video conference scrolls through a document, scrolling occurs in the documents displayed to other parties. For example, the Office Action asserts that, if a party places a mouse-cursor

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over scroll bars 62 or 64 in Glaser's Figure 2, to perform scrolling, that similar mouse-cursors are placed over scroll bars in other computers, and scrolling in the other computers is thereby induced.

Appellant submits that these assertions are incorrect.

Further, even if these assertions **ARE** correct, the claims are not shown in Glaser. For example, claims 1, 6, and 7 state that certain events occur in remote computers **after** the scrolling terminates. As another example, claim 8 states that "intermediate positions" are not displayed. Both examples are inconsistent with the PTO's parallel scrolling supposedly found in Glaser.

Fundamental Error in PTO's Position

Everybody knows that, using Microsoft Windows (which Glaser references), you can scroll **without moving the mouse**. You place the mouse-cursor over a scroll bar, at either the top or bottom, over an arrow, and press the mouse button. Scrolling occurs. But the mouse does not move.

The Final Office Action relies on Glaser's transmission of mouse coordinates to show inducement of scrolling in other computers. However, Glaser only transmits coordinates when the mouse moves. (Support for this proposition is given herein.)

Thus, if a user in Glaser scrolls without moving the mouse, as is possible, no coordinates are transmitted. No scrolling is

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induced in Glaser's other computers.

This makes sense: Glaser **does not intend** to induce scrolling in the other computers.

Copying of Host's Cursor when Placed over Scroll Bar
Would be Required in Glaser

That is a Necessary Condition

Glaser Does not do That

The person manipulating the cursor will be termed the "host." The other people, who view the other computers, will be termed the "audience."

Glaser discusses copying of mouse-cursors, but **only when** they are within the whiteboard area 60. He does not copy cursors when present on the scroll bars.

This conclusion is supported by the fact that the copying is done through "relative" cursor coordinates, which are "relative" to the whiteboard 60 (as opposed to being "absolute" with respect to the overall display). Thus, if the host's cursor moves outside the whiteboard 60, the copied cursors disappear. This disappearance is shown in Glaser's Figure 5, wherein the dashed lines lead to (now-disappeared) mouse-cursors.

If a cursor were copied when placed over a scroll bar 62 or 64 in Glaser's Figure 2, then the dashed lines leading to the cursor would also be copied at those locations. The dashed lines

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in Glaser's Figure 5 would **extend over those scroll bars**.

But they do not, indicating that the host's cursor, if placed over a scroll bar, is not copied either.

Thus, the operation of Glaser postulated by the PTO requires copying of Glaser's host's cursor at a particular time, namely, when the host places the cursor over a scroll bar. That does not happen.

Copying of Cursor-over-Scroll-Bar is NECESSARY Condition
But not a SUFFICIENT Condition.I

A Mouse Click Must Also be Delivered to the
Copying Computers (ie, those in the Audience)

Glaser does not do That

In the ordinary case, merely placing a cursor over scroll bar 62 or 64 in Glaser's Figure 2 does not, by itself, cause scrolling. A mouse-button must be pressed in addition, by the person requesting the scrolling.

Assume arguendo that Glaser teaches "remote scrolling," wherein the host causes scrolling on the host's computer, and all other computers follow suit and also perform scrolling. Then, in **all the other** computers, the button-press described in the preceding paragraph must be simulated. Otherwise, the only event occurring is that a copy of a cursor is placed over a scroll bar.

Thus, copying a cursor onto a scroll bar, by itself, is insufficient to cause scrolling.

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Consistent with the preceding, Glaser's Figure 13 illustrates steps taken by the recipient computer. His Figure 13 does not contain a mouse-button execution step. Thus, even if Glaser copies a mouse-cursor over a scroll bar 62 or 64 (which he does not), he does not accompany that copy with a button-press, issued to the recipient computer. Consequently, scrolling does not occur in that computer.

(A technical point should be observed. It is probably not necessary that a copied cursor appear on the screen of an audience-computer in which scrolling is to be induced. The important event is that a mouse message be delivered to the processor indicating that the mouse-cursor is now placed over the scroll bar. But **displaying** a mouse-cursor is probably not required.)

Copying of Cursor-over-Scroll-Bar is NECESSARY Condition
But not a SUFFICIENT Condition II

The Mouse Must be Dragged in the
Copying Computers (ie, those in the Audience)

Glaser does not do That

This point should be self-evident, based on the preceding point. It is insufficient to merely copy an image of a mouse-cursor onto a scroll bar, to cause scrolling in the audience-computer, that is, the computer onto which the cursor was copied.

As just explained, a mouse-click is also required. In addition, in certain cases, the mouse must be "dragged." For

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example, if the elevator bar EB of Appellant's Figures 7 and 8 is used, the physical mouse must be dragged.

Signals emulating that dragging must be generated in the audience-computers in Glaser. Glaser does not discuss that.

THEREFORE, Glaser does not discuss emulation of the signals required to cause scrolling in his audience-computers. A mouse-click is one required emulation. He does not discuss that. Dragging is another required emulation. He does not discuss that.

When Glaser Copies a Cursor to an Audience-Computer,
He Merely Generates a Drawing of an Arrow.

That Arrow looks Different from an Actual Mouse-Cursor.

There is no Reason to Believe that the Arrow has
The Properties of a Cursor.

Thus, Even if the Arrow is Positioned over a Scroll Bar,
There is no Reason to Believe that It Will be Interpreted
As A Cursor.

Pointer-icon 66 in Glaser's Figure 3 is an ordinary mouse-cursor. (Glaser, column 4, lines 61 - 63.) Glaser generates an arrowhead 68 in his Figure 4 on an audience-computer. That arrowhead 68 extends from picture 54, which represents the user who generated the pointer-icon 66 in Figure 3. (Column 4, line 66 et seq.)

Arrowhead 68 is nothing more than a graphical image. There is no reason to believe that it has the properties of a cursor. There is no reason to believe that, if it were positioned over a

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scroll bar, then it would be recognized as an ordinary mouse-cursor.

Thus, Glaser does not copy anything onto the audience-computers which would cause scrolling.

An example will punctuate this conclusion. Assume, contrary to the evidence, that Glaser's copied arrowhead 68 in his Figure 4 does, in fact, extend over a scroll bar. Assume that, at that instant, a person looking at the copied arrowhead 68 presses a mouse button, but the mouse-cursor is not located over the scroll bar.

Does scrolling occur ?

PTO's Postulated Operation of Glaser Causes
Impossible Situations

If the operation postulated by the PTO occurred in Glaser, impossible situations would arise. Suppose one party scrolls his own display "up." Supposed another party scrolls his display "down." What happens under the PTO's postulated operation ? How can both displays go "up" and "down" at the same time ? What happens on a third party's display ?

The answer is that nothing happens, because the PTO's operation does not occur in Glaser.

And Glaser does not discuss it. Glaser only discusses copying of cursors found in his whiteboard area 60, if a mouse-button is

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pressed.

Comment

Not all points made in this Summary are elaborated below. Some are considered self-explanatory.

End Summary

Response to 102 - Rejections

Glaser will be described.

Characterization of Glaser Reference

Glaser shows a conference between three persons, using three workstations, at three different locations. Figure 2 of Glaser illustrates a display seen by all persons. At this time, no person has pressed a button on a mouse. (Column 2, lines 57 - 60.)

Figure 3 illustrates the display seen by the first person, when that person moves a mouse-cursor into the "work area 60." Figure 4 illustrates the displays seen by the other two persons, at this time. Arrowhead 68 is drawn, and it extends from picture 54, representing the user of the computer shown in Figure 3.

An Aside

Applicant points out that Glaser seems to be inconsistent here. He does not state that the first person has pressed the

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mouse button. Nevertheless, he states that arrows are generated on the displays of the other two persons. (See column 4, line 60 - column 5, line 9.) At other locations, he states that the first person's mouse cursor is only copied when the button is pressed. (See top of column 7.)

Perhaps Glaser forgot to state that the button is pressed. This conclusion is supported by his statement in column 5, lines 10 - 13, which states that ". . . the first user **CONTINUES** pressing his mouse button . . ." Therefore, it will be assumed that the cursor is copied to the other displays only when the mouse button is pressed.

End Aside

Figure 5 shows the displays of the other two persons, when the first person moves his mouse, while the button is pressed. (Column 5, lines 10 - 20.) The dashed lines point to the mouse-cursor, which is not visible.

Significantly, the mouse-cursor is **outside** the whiteboard area 60, and it is not shown. This leads to the conclusion that only mouse-cursors within the whiteboard area 60 are copied to the other displays.

Figure 6 illustrates the display of the second person, when the other two persons pressed their mouse-buttons. Two mouse-cursors are present. (Column 5, lines 21 - 29.)

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Figure 7 illustrates a display seen by one of the participants. Mouse-cursor 66 is under control of that participant. The arrows extending from pictures 54 and 58 represent the positions of the mouse-cursors on the computers of those participants, and those cursors, on those computers, are controlled by those participants respectively.

Several significant features of Glaser are the following.

ONE. As stated above, he only copies cursors present in the whiteboard area 60. (See truncated dashed lines in Figure 5 and column 6, lines 52 - 55.) This is supported by his flow chart, wherein decision block 204 in Figure 11 inquires whether the cursor is within the whiteboard area 60. If not, nothing happens: the logic returns to block 202, and idles in a loop between blocks 202 and 204.

Thus, if a cursor is placed within scroll bar 62 or 64 in Figure 2, it is not copied, because those scroll bars lie outside whiteboard area 60.

TWO. It could be argued that the last statement is incorrect, on the grounds that Glaser states that the scroll bars 62 and 64 are located at the "edges" of the whiteboard area 60. (Column 4, lines 50 - 53.) However, the main reason that this argument is incorrect is that it would lead to an **impossible mode of operation** in Glaser.

Assume that the first party placed his cursor over the "up"

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arrow in scroll bar 62 in Glaser's Figure 2. Assume that the second party placed his cursor over the "down" arrow in that same scroll bar (but on the second party's display). Assume that both parties then press the mouse-buttons.

What happens ?

Does the whiteboard scroll "down" or "up" on all parties' screens ? Plainly, neither happens. The first party's whiteboard scrolls "up," the second party's whiteboard scrolls "down," and the third party's screen does nothing.

This is consistent with Glaser's overall philosophy. His intent is to display other parties' cursors. His intent **IS NOT** to give parties control over **other parties'** computers.

Therefore, Glaser does not allow one party to scroll another party's display.

-- That would lead to impossible situations,
as just explained.

-- That is inconsistent with Glaser's basic
operation, which is to "share" cursor
visibility, not to share control.

(See Glaser's Summary of Invention, first paragraph. Also, Glaser's flow charts of Figures 11 - 13 discuss only displaying cursors, and not issuing commands by actuating buttons. Scroll bars are buttons.)

THREE. Merely placing a cursor over a scroll bar is

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insufficient to induce scrolling. A mouse-button is required.

Glaser's Figure 13, which describes the operations of his audience-computers, to which the cursors are copied, discusses no mouse-button signals issued to the recipient computers.

But a mouse-button signal is required to induce scrolling. Thus, even if cursors are copied over scroll bars, they do not **operate** the scroll bars.

FOUR. Glaser only shares **relative** mouse coordinates. They are **relative** as to the whiteboard area 60. Thus, if a party's mouse-cursor makes an exit from the whiteboard area 60, the cursor disappears, although the last coordinate while within the whiteboard area would allow drawing of the dashed line in Figure 5. (See column 7, lines 43 - 45.)

Interim Conclusion

Therefore, Applicant submits that Glaser only replicates mouse-cursors which are within his whiteboard area 60. If one party moves a mouse, a moving mouse-cursor appears on the other parties' displays. (Column 7, lines 43 - 45.)

If the party moves the mouse outside the whiteboard area, the mouse-cursors on the other displays disappear. (See dashed lines in Figure 5.) One reason is that **relative** mouse coordinates are transferred. "Relative" within the whiteboard area 60.

Glaser's scroll bars 62 and 64 are outside the whiteboard

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area. Even if one party moves his own mouse-cursor over his own scroll bar, the copies of that cursor then disappear on the other displays. This is illustrated by the dashed lines in Glaser's Figure 5.

If one party could place a cursor onto another's scroll bar, then the dashed lines in Glaser's Figure 5 would cross the scroll bars 62 and 64, and terminate at the **outer** edges of the scroll bars, not the **inner** edges as shown. This illustrates that Glaser's scroll bars 62 and 64 are **not within** his whiteboard area 60.

Further, if, in Glaser, one party could move a mouse-cursor over another party's scroll bar, impossible situations would arise. As explained above, suppose one party tried to scroll "up," and another party tried to scroll "down." What happens ?

In conclusion, since one party cannot place a mouse-cursor over another party's scroll bar, one party cannot scroll another party's computer. That is consistent with Glaser, who is concerned with **display** of cursors only.

End Glaser Characterization and Interim Conclusion

Claim 1

Claim 1 recites:

1. In a conference among multiple computers which are operated by participants, the improvement comprising the following steps:

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- a) detecting, in one computer, the occurrence of scrolling through a document;
- b) when said scrolling terminates, ascertaining which part of the document is being displayed by said computer; and
- c) after said ascertainment, transmitting to other computers data which enables them to display said part of the document.

Claim 1(a) recites detection of "scrolling through a document." Glaser fails to show "scrolling." MPEP § 2131 states:

A claim is anticipated only if **each and every element** as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.

Instead of showing scrolling, Glaser discusses

- 1) movement of a mouse-cursor over a whiteboard 60 on one computer's display and
- 2) if the movement is accompanied by pressing of a mouse-button, copies of the moving cursor are generated on the other computers, but only within whiteboard 60.

To repeat: Glaser "observes" one party moving a mouse-cursor and, **IF THE MOUSE BUTTON IS DEPRESSED**, replicates the movement on the other computers. In addition, Glaser draws a line from the picture of the person who moved the mouse, to the mouse-cursor on the screens. (Column 3, lines 33 - 37.) This allows everybody to

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see who moved the mouse-cursor. (See Figure 5.)

Significantly, this replication **ONLY OCCURS WHEN THE MOUSE CURSOR IS POSITIONED OVER THE WHITEBOARD 60.** (Column 6, lines 52 - 54; column 7, bottom - column 8, top; column 9, line 48.) But the whiteboard does not cover the entire computer screen.

Therefore, Glaser does not replicate "scrolling." He only replicates mouse-cursor movements within whiteboard 60, and only if the mouse-button is depressed. Replication of scrolling would require replication of mouse-cursors over Glaser's scroll bars 62 and 64, which does not occur.

Further, as explained above, if one party in Glaser could scroll another's display, impossible conflicts could arise. Those would render Glaser inoperative. For a reference to be anticipatory under section 102, the reference must be enabling. (See Patents by D. Chisum, sections 3.06(1)(a) and 304(1).)

For example, supposed one party saw his display scrolling, and moved his own cursor over the scroll bar to stop it. What would happen ?

Still further, scrolling in Glaser is contrary to Glaser's own goals. Glaser's Summary states that his invention allows all conference participants to see the mouse-cursors of the others. His Figure 8 illustrates two such cursors, seen by Party A.

Suppose that Party B scrolls the display of Party A. The cursors of Figure 8 will disappear, as will the "30%" and "5%" to

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which the cursors point. The reason is that both the "30%" and the "5%" disappear.

Glaser teaches against that.

The preceding applies to claims 2 and 4 - 7.

Claim 2

Claim 2 recites:

2. Improvement according to claim 1, wherein the data consists essentially of a location of a group of data within the document.

Claim 2 states that the data transmitted identifies location of data within a document. The mouse-coordinates which Glaser transmits indicate relative position of a cursor within his region 60.

Even assuming that region 60 shows a "document," the mouse-coordinates only indicate location within the **PART** of the document which is shown in region 60. Claim 2 does not recite that.

Claim 5

Claim 5 recites:

5. Improvement according to claim 1, and further comprising the step of

d) maintaining a telephone conference among the participants.

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The PTO relies on column 3, lines 57 - 65, of Glaser to show this. However, that location states that the audio and video signals are carried "over the network 20." That "network" is the Internet, for example.

Glaser is plainly discussing a video conference, which is not a "telephone conference" as recited in claim 5.

Claim 6

Claim 6 recites:

6. In a conference among multiple computers which are operated by participants, the improvement comprising the following steps:

- a) detecting, in one computer, the occurrence of scrolling through a document, wherein parts of the document are sequentially displayed on a screen;
- b) when said scrolling terminates, ascertaining a coordinate within the document which is contained within the part of the document being displayed; and
- c) transmitting a data packet to a packet-switched network for delivery to other of the multiple computers.

Glaser does not detect scrolling, as in claim 6(a), and then take the actions of claim 6(b) when scrolling terminates.

Scrolling may occur in Glaser, as when a user scrolls his own

computer. But the actions of claim 6(b) do not.

The Final Action, page 2, section 1(a), asserts that Glaser, column 6, lines 53 - 67 and column 7, lines 1 - 15, show claim 6(b). However, those passages only refer to transmitting relative mouse-cursor coordinates. There is no reference to scrolling, nor to termination of scrolling, as causing the transmission.

Claim 7

Claim 7 recites:

7. An apparatus, comprising:
 - a) a computer-readable storage medium;
 - b) software means, physically configured in the storage medium, for:
 - i) detecting when scrolling through a document occurs in a computer;
 - ii) detecting when said scrolling terminates, and, upon termination, ascertaining which part of the document is being displayed by said computer; and
 - iii) transmitting to other computers a coordinate which enables them to display said part of the document.

The parts of Glaser relied on by the PTO to show claim 7(b)(ii) do not detect termination of scrolling. The parts (column 6, lines 53 - 67, and column 7, lines 1 - 15) show detection of movement of a mouse.

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Further, Glaser does not transmit the "coordinate" of claim 7(b)(iii). He transmits position of a cursor within his region 60. That does not cause any part of a document in an audience-computer to now be displayed, as claimed. It merely allows an arrow to be drawn to that position.

Claim 11

Claim 11 recites:

11. Improvement according to claim 1, wherein the scrolling at said one computer is accompanied by motion of an elevator bar displayed by said one computer.

According to the PTO, the scrolling of claim 11 is accompanied by scrolling at the audience-computers in Glaser. If so, then parent claim 1(b) and (c) are absent.

Those claims state that, after scrolling terminates, certain data is transmitted, enabling a certain part of the document to be displayed by the audience-computers. That is contrary to the PTO's assertion.

Response to Obviousness-Rejections

Claims 3, 8 - 10, 17, and 18 were rejected as obvious, based on Glaser and Furst.

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Claim 3

Claim 3 recites:

3. Improvement according to claim 1,
wherein the data enables the other computers
to navigate to said part of the document,
without scrolling.

"NAVIGATING," AS DEFINED BY APPLICANT,
NOT SHOWN IN FURST,
ONLY WORD "NAVIGATE"

The Specification, near the end, in "Additional Consideration"
number 1, draws a distinction between "scrolling" and "navigating."
Claim 3 recites "navigating."

Applicant points out that the definitions contained therein
are Applicant's own. The mere fact that Furst uses the word
"navigate" does not mean that Furst shows the operation recited in
claim 3, as defined by Applicant. Therefore, the PTO has not shown
the "navigation" as defined by Applicant within Furst.

NO TEACHING GIVEN

No teaching has been given for combining the references. The
rationale given is that

. . . [adding the] navigation and web loading
of Furst to . . . Glaser [increases] the
system speed and [adds] more information
sources.

(Office Action, page 4.)

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However, this rationale does not qualify as a teaching under section 103 for several reasons.

Reason 1

One is that the rationale is a naked conclusion, supported by no evidence. That is, no evidence has been cited showing that "system speed" is increased, and "more information sources" are added.

In fact, these two factors (increased speed and more information) would seem to be contradictory. For a given system, if you **increase** the amount of information transferred, you will **reduce** "system speed." One reason is that the processor(s) in the system can only execute a limited number of instructions per second. If you devote those instructions to information transfer, they you remove instructions available for other tasks, thereby reducing "system speed."

Reason 2

A second reason is that the addition of Furst to Glaser would actually **decrease** the speed of Glaser's system. With Furst's "navigation," Glaser's computers must now perform "navigation" in addition to their usual tasks. Speed will decrease.

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Reason 3

A third reason is that no teaching in Glaser of a desire for both increased system speed and greater information has been shown.

Reason 4

A fourth reason is that the rationale merely sets forth two supposed characteristics of the combination of references, but **after making the combination**. A teaching in favor of making the combination in the first place is required.

Reason 5

A fifth reason is that the rationale does not follow the CAFC's decision of In re Dembiczak, 175 F. 3d 994, 50 USPQ2d 1614 (Fed. Cir. 1999).

In brief, Dembiczak states that

- **objective evidence** of a teaching for combining references must be provided;
- the Examiner's speculation does not qualify as objective evidence;
- numerous sources can provide a teaching to combine references;
- knowledge of one skilled in the art can act as a source;
- however, THE RANGE OF SOURCES AVAILABLE

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DOES NOT DIMINISH THE REQUIREMENT FOR ACTUAL
EVIDENCE;

-- broad conclusory statements by the
Examiner do not qualify as evidence; and

-- "particular factual findings" as to the
teaching are required, and gives reasons why
facts are necessary.

The rationale has failed to set forth facts, or objective
evidence, in the prior art.

The preceding comments on the rationale for combining the
references apply to claims 8 - 10.

Claim 8

The PTO asserts that Glaser shows almost all of claim 8.
(Final Office Action, bottom of page 3.) That is not correct.
Claim 8 recites:

8. A method of operating a group of
computers, comprising the following steps:

a) loading a common document into the
computers;

b) detecting scrolling at a first computer,
which causes a displayed image to scroll from
a first position within the document, through
intermediate positions within the document, to
a final position within a document; and

c) transmitting information to other
computers which are currently displaying the

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first position of the document, which causes the other computers to display said final position within the document, without displaying intermediate positions.

MPEP § 2143.03 states:

To establish prima facie obviousness . . . **all the claim limitations** must be taught or suggested by the prior art.

Claim 8(c) states that "other computers" will be caused to display the "final position" attained in the scrolling in the "first computer."

Glaser does not show that. At best (for the PTO), Glaser copies pointers. But if one user scrolls in the area 60, that does not cause other computers to scroll.

RESPONSE TO PTO'S RESPONSE TO ARGUMENTS

Point 1

The Final Office Action, page 4, states:

The scroll bars shown in Figures 2 - 7 as part of the whiteboard area 60, the disclosed coordinates messaging . . . works perfectly well in the scroll bars area and there is no other purpose for the scroll bars but to be used in the whiteboard area.

In this passage, the phrase "the disclosed coordinates messaging" apparently refers to the messages in which coordinates of the mouse

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are transferred.

This statement contains two parts, and neither is supported by Glaser. One part is the assertion that, when a participant moves his mouse-cursor over his scroll bar, Glaser's system moves the other cursors on the other displays to the same positions, namely, over the scroll bars. Several problems exist in this assertion.

One is that no support in Glaser has been shown for this assertion.

A second is that the assertion is contrary to the dashed lines shown in Glaser's Figure 5. As explained herein, those dashed lines lead to (now vanished) copies of mouse-cursors. If the cursor-copies did not vanish when they left the whiteboard 60, then the dashed lines would extend into the scroll bar. The dashed lines do not.

A third problem is that, as explained herein, even if the cursor-copies did move onto the scroll bars, that is insufficient to cause scrolling.

The second assertion is that no other purpose exists for the scroll bars, except "to be used in the whiteboard area." This assertion, if true, confuses two issues.

One: The person utilizing the computer display which shows the scroll bars can actuate those scroll bars, using that person's

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mouse. But that does not show the invention.

Two: **Another person** moves his mouse-cursor over a scroll bar. As explained herein, no copy of that cursor is moved over scroll bars of other computers. Also, even if such a copy is created, that is insufficient to cause scrolling.

Point 2

Appellant explained that, if Glaser allowed each person to cause scrolling on the displays of others, then an impossibility would arise. Assume a conference among three people: A, B, and C. What happens if A scrolls "up," while B scrolls "down." What happens on C's display ?

The Final Action asserts, page 4, bottom, that the individual parties resolve this by coordinating themselves, and avoiding the impossibility.

However, that statement is not prior art. It is not found in Glaser. It is the PTO's own fabrication.

A fabrication cannot be used as rebuttal to Appellant's argument.

Point 3

The Final Action, top of page 5, states that Appellant

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asserted that Glaser's flow charts do not discuss actuation of scroll bars. In attempted rebuttal, the Final Action points to Glaser's step 410.

However, that step merely refers to updating the position of the pointer-icon, if necessary. Glaser's Figure 3 shows a pointer-icon 66. (Column 4, lines 60 - 65.)

In addition, as explained herein, Glaser's displays show **TWO TYPES** of pointer. Pointer 66 in his Figure 3 is a standard mouse-cursor, controlled by the user of the display in the Figure. However, arrow 68 in his Figure 4 shows the **COPY** which is generated on the displays of others. That **copy** extends from picture 54, which shows the user of the computer of Figure 3, namely, the person controlling the mouse-cursor 66 in Figure 3.

The situation is summarized in Glaser's Figure 7, which shows three cursors: a standard mouse cursor 66 and two copies. The two copies are controlled by users 54 and 58.

Therefore, Glaser shows **TWO TYPES** of cursor. But nowhere does he state that the copy-cursors are effective to actuate scroll bars.

Further, Glaser references the Windows operating system, produced by Microsoft Corporation. (Column 3, lines 50 - 53.) It is well known that the scroll bars in that system are actuated by "mouse messages." That is, a software routine continually monitors position of the physical mouse (though signals transmitted by the

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mouse), and generates a mouse-cursor on the computer display.

Other software routine(s) compare the position of the mouse-cursor with reference positions, and when the cursor falls on a reference position, the routine(s) take specific actions.

-- For example, when the mouse-cursor falls on a menu-icon, a menu will pop up.

-- As another example, when the mouse-cursor moves down the menu, different menu items become highlighted.

Similarly, when the mouse-cursor is placed over a scroll bar, routines become aware of that. However, nothing happens until the physical mouse-button is pressed, and the physical mouse is moved. At that time, the button-press causes routine(s) to monitor mouse-cursor position, and, if the mouse-cursor is over the "elevator bar," to cause scrolling to occur, and the elevator bar to move, as the mouse-cursor moves.

Therefore, scrolling requires three events.

- 1) The mouse-cursor be properly positioned in the scroll bar.
- 2) The physical mouse-button be pressed.
- 3) The physical mouse be moved.

These events are transmitted to the operating system as "mouse messages."

For Glaser's cursor-copy 68 in his Figure 4 to cause

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scrolling, messages indicating the three events just described must be delivered to the computer generating the display shown in Figure 4. Glaser does not discuss such messages.

Point 4

The Final Action, page 5, asserts that "Applicant argues that Glaser system is limited to whiteboard area and not cover entire computer screen."

Appellant's actual statement was this:

To repeat: Glaser "observes" one party moving a mouse-cursor and, **IF THE MOUSE BUTTON IS DEPRESSED**, replicates the movement on the other computers. In addition, Glaser draws a line from the picture of the person who moved the mouse, to the mouse-cursor on the screens. (Column 3, lines 33 - 37.) This allows everybody to see who moved the mouse-cursor. (See Figure 5.)

Significantly, this replication **ONLY OCCURS WHEN THE MOUSE CURSOR IS POSITIONED OVER THE WHITEBOARD 60**. (Column 6, lines 52 - 54; column 7, bottom - column 8, top; column 9, line 48.) But the whiteboard does not cover the entire computer screen.

Therefore, Glaser does not replicate "scrolling." He only replicates mouse-cursor movements within whiteboard 60, and only if the mouse-button is depressed. Replication of scrolling would require replication of mouse-cursors over Glaser's scroll bars 62 and 64, which does not occur.

(Appellant's Amendment mailed November 20, 2002, page 12.)

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The Final Action asserts that Appellant's statement is irrelevant because "it is not directly claimed." This assertion fails to follow the law.

As the passage cited above shows, Appellant showed that Glaser only replicates movements of a mouse-cursor when the mouse cursor is located in a specific area, namely, the whiteboard 60. That statement, plus one or two others, means that Glaser cannot show replication of scrolling.

The other two statements are:

- 1) Glaser does not replicate the mouse cursor when it exits the whiteboard 60 and enters the scroll bars. Thus, how can scrolling occur on a computer displaying a copy of the mouse cursor, when the copy disappears when it reaches a scroll bar ?
- 2) Even if the copy remains in existence when it reaches a scroll bar, three types of mouse-message are required for scrolling to occur on the copy-computer. Glaser does not discuss those messages.

Therefore, the relevance of the statement in question is at least this: it is part of a larger argument which, if true, shows that Glaser does not allow one person to cause scrolling on

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another's computer. Appellant's claims recite the latter.

Point 5

The Final Action, page 5, disputes Appellant's assertion that Furst does not show "navigating." In Appellant's previous Amendment, Appellant stated:

"NAVIGATING," AS DEFINED BY APPLICANT,
NOT SHOWN IN FURST,
ONLY WORD "NAVIGATE"

The Specification, near the end, in "Additional Consideration" number 1, draws a distinction between "scrolling" and "navigating." Claim 3 recites "navigating."

Applicant points out that the definitions contained therein are Applicant's own. The mere fact that Furst uses the word "navigate" does not mean that Furst shows the operation recited in claim 3, as defined by Applicant. Therefore, the PTO has not shown the "navigation" as defined by Applicant within Furst.

(Appellant's Amendment mailed November 20, 2002, page 14.)

The part of the Specification in question is this:

Additional Considerations

1. A distinction should be drawn between "scrolling" and "navigating." The former refers to scanning through document 50 in Figure 8. By analogy, a movie film is "scrolled" when it runs through a motion picture projector.

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During slow scrolling, all parts of document 50 will be visible. However, it is possible that, during rapid scrolling, parts of the document 50 may not be visible. For example, if the elevator bar EB is moved rapidly, the scan may occur so fast that parts of the underlying document may not appear.

This fact illustrates one characteristic of scrolling: when motion of the elevator bar EB terminates, part of the document will then be displayed. The displayed part is derived from the single screen's worth of the document 50 which brackets the elevator bar EB in some pre-defined manner. For example, the bracketing may span from one-half a screen's worth above the bar EB to one-half a screen's worth below the bar EB. In a sense, a miniature screen MS in Figure 8 can be conceived as following the elevator bar EB. That part of the document contained within the miniature screen MS is displayed on the computer.

In contrast, "navigating" refers to jumping from screen-to-screen, as by moving along the flow chart of Figure 6. In navigating, no elevator bar is used, so that no cessation of motion of the elevator bar occurs and, consequently, the cessation causes no part of a document to appear.

In one form of the invention, one computer scrolls, and, when scrolling terminates, the other computers immediately navigate to the same position in the document. For example, the display of the host in Figure 2 may be scrolled. Upon termination of the scrolling, the computers of the other participants navigate to the corresponding position within the web page, and display the same part of the page which the host displays. But the other participants do not display the intervening parts, which the host would have displayed, if the host scrolled sufficiently slowly.

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The claim in question is claim 3, which states:

3. Improvement according to claim 1, wherein the data enables the other computers to navigate to said part of the document, without scrolling.

This has not been shown in either reference, even if combined.

Appellant points out that one subject matter covered by this claim is described at the end of "Additional Consideration" number 1, copied immediately above. When the leader rapidly scrolls from, say page 1 of a document to page 100, the followers' computers jump to page 100, without displaying the intervening pages. They "navigated" "without scrolling."

Point 6

The Final Action asserts that Glaser does show scrolling. Appellant apologizes for creating a misunderstanding.

In the discussion in question, claim 3 was under consideration. Claim 3 states that, **in the "other computers,"** navigation without scrolling occurs.

In Glaser, neither navigation nor scrolling occurs in the "other computers." Thus, Glaser is contrary to claim 3.

Point 7

The Final Action, beginning on page 5, bottom, purports to

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provide a teaching for combining the references.

The Final Action asserts that adding Furst to Glaser will "increase the speed of the system." That is not a teaching in favor of combining references. That merely points to a supposed characteristic of the combined references, but after the combination is made.

A teaching for making the combination in the first place is required.

In addition, the assertion is a naked conclusion, with no factual support provided.

Further, the assertion compares apples with oranges.

-- Furst may "navigate," as when a user actuates a link, to jump from one web page to another.

-- One of Glaser's conference participants may "scroll" down Glaser's whiteboard 60.

But those are completely different processes. By analogy,

-- You may remove a book from a library shelf and "scroll" through it, by flipping pages.

-- You may select another book (ie, "navigate" to the other book).

The two processes are completely different. There is no basis for comparison as to speed.

From another point of view, the PTO's assertion apparently

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assumes that, if Glaser scrolled long enough, he would eventually get to the screen to which Furst "jumped." That is a false assumption.

Point 8

The Final Action, page 6, fulfills Appellant's requires that "the data" of claim 3 be identified in the references. Claim 3 and its parent claim 1 state as follows:

1. In a conference among multiple computers which are operated by participants, the improvement comprising the following steps:

a) detecting, in one computer, the occurrence of scrolling through a document;

b) when said scrolling terminates, ascertaining which part of the document is being displayed by said computer; and

c) after said ascertainment, transmitting to other computers **data** which enables them to display said part of the document.

3. Improvement according to claim 1, wherein **the data** enables the other computers to navigate to said part of the document, without scrolling.

Clearly, under claim 1, the "data" is transmitted to "other computers" from the "one computer." In claim 1(a), "scrolling" occurs in the "one computer," and the "data" is generated as a result.

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The Final Action asserts that the "link" of Furst's column 1, lines 40 - 51, shows such "data." That cannot be so.

The "links" are, in essence, (1) addresses of web pages, together with (2) a modality to detect selection by a user, and transmit the address to the Internet, thereby causing a computer at that address to transmit a web page, or other data.

"Links" do not have the properties of the "data" recited in claim 1. Again, claim 1 states that

- The "data" is generated in response to "scrolling" in the "one computer;" and
- The "data" is then transmitted to "other computers."

Further, the "data" has a specific property under claim 1(c): it "enables [the other computers] to display said part of the document." "Said part" is the "part" recited in claim 1(a). Furst's "link" does not possess this property.

Point 9

The Final Action, page 6, purports to respond to Appellant's request that certain items be identified. Appellant's request was this:

Claim 8 recites:

8. A method of operating a group of computers, comprising the following steps:

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- a) loading a common document into the computers;
- b) detecting scrolling at a first computer, which causes a displayed image to scroll from a first position within the document, through intermediate positions within the document, to a final position within a document; and
- b) transmitting information to other computers which are currently displaying the first position of the document, which causes the other computers to display said final position within the document, without displaying intermediate positions.

MPEP § 2143.03 states:

To establish prima facie obviousness . . . **all the claim limitations** must be taught or suggested by the prior art.

Applicant requests that the "scrolling" of claim 8(b) be identified in Glaser, and its detection. Applicant also requests that the jumping from the first position to the last position, without displaying the intermediate positions, be identified.

(Appellant's Amendment mailed November 20, 2002, page 18.)

The Final Action's response is this:

Glaser system transmits the pointer position data to other participating computers without any intermediate positions (see column 7, lines 1 - 15.)

(Final Action, page 6.)

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This response fails to show the "jumping" which Appellant requested to be identified. The "jumping" is a reference to the operation of claim 8(b). The latter recites moving from one position in a document to another position "without displaying intermediate positions," and doing that in "other computers."

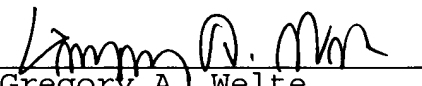
The PTO has merely identified Glaser's particular mode of copying a moving mouse-cursor to other computers. If the mouse-button is depressed, only the beginning- and ending locations of the mouse-cursor are displayed. Intermediate positions are not copied, to reduce message traffic.

That fails to show claim 8(b).

CONCLUSION

Appellant requests that the Board reverse all rejections, and pass all claims to issue.

Respectfully submitted,


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ATTACHMENT: Appealed Claims

9. APPENDIX

APPEALED CLAIMS

1. In a conference among multiple computers which are operated by participants, the improvement comprising the following steps:

- a) detecting, in one computer, the occurrence of scrolling through a document;
- b) when said scrolling terminates, ascertaining which part of the document is being displayed by said computer; and
- c) after said ascertainment, transmitting to other computers data which enables them to display said part of the document.

2. Improvement according to claim 1, wherein the data consists essentially of a location of a group of data within the document.

3. Improvement according to claim 1, wherein the data enables the other computers to navigate to said part of the document, without scrolling.

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4. Improvement according to claim 1, wherein all computers are linked by a packet-switched network, and the data is transmitted along said network.

5. Improvement according to claim 1, and further comprising the step of

d) maintaining a telephone conference among the participants.

6. In a conference among multiple computers which are operated by participants, the improvement comprising the following steps:

- a) detecting, in one computer, the occurrence of scrolling through a document, wherein parts of the document are sequentially displayed on a screen;
- b) when said scrolling terminates, ascertaining a coordinate within the document which is contained within the part of the document being displayed; and
- c) transmitting a data packet to a packet-switched network for delivery to other of the multiple computers.

7. An apparatus, comprising:

- a) a computer-readable storage medium;
- b) software means, physically configured in the storage

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medium, for:

- i) detecting when scrolling through a document occurs in a computer;
- ii) detecting when said scrolling terminates, and, upon termination, ascertaining which part of the document is being displayed by said computer; and
- iii) transmitting to other computers a coordinate which enables them to display said part of the document.

8. A method of operating a group of computers, comprising the following steps:

- a) loading a common document into the computers;
- b) detecting scrolling at a first computer, which causes a displayed image to scroll from a first position within the document, through intermediate positions within the document, to a final position within a document; and
- b) transmitting information to other computers which are currently displaying the first position of the document, which causes the other computers to display said final position within the document, without displaying intermediate positions.

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9. Method according to claim 8, wherein the document is loaded from a common web site, from a packet-switched, public-access network.

10. Method according to claim 8, wherein the information of paragraph (b) is transmitted to the other computers through a packet-switched, public-access network.

11. Improvement according to claim 1, wherein the scrolling at said one computer is accompanied by motion of an elevator bar displayed by said one computer.

12. Improvement according to claim 1, wherein said document comprises multiple pages, and said scrolling involves displaying different pages at different times.

13. Improvement according to claim 1, wherein said document cannot be displayed in a single computer display, and said scrolling enables the user to selectively

- i) display different parts of the document,
- ii) while other parts are not displayed.

14. Improvement according to claim 1, and further comprising
d) providing synchronized browsing capability of a web

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site to a subset of computers in said group, wherein displays of the subset are caused to present common material.

15. Improvement according to claim 6, wherein the scrolling at said one computer is accompanied by motion of an elevator bar displayed by said one computer.

16. Improvement according to claim 6, and further comprising
d) providing synchronized browsing capability of a web site to a subset of computers in said group, wherein displays of the subset are caused to present common material.

17. Method according to claim 8, wherein the scrolling at said first computer is accompanied by motion of an elevator bar displayed by said first computer.

18. Method according to claim 8, and further comprising
c) providing synchronized browsing capability to at least some computers in said group.